TIERRA SOLUTIONS, INC.SM

T□□□□□ □π□□ V□□ US Mail

June 20, 2016

Mr. Jeffrey Thein
New Jersey Department of Environmental Protection
Division of Water Quality Bureau of Point Source Permitting – Region One
P.O. Box 029
Trenton, New Jersey 08625-0029

Re: Discharge Monitoring Report for May 2016
Diamond Alkali Superfund Site
Newark, New Jersey

Dear Mr. Thein:

In accordance with the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Permit Equivalent, dated May 2, 2000, for the Diamond Alkali Superfund Site (the site) in Newark, New Jersey, Tierra Solutions, Inc. (Tierra, formerly Chemical Land Holdings, Inc.) has prepared the Discharge Monitoring Report (DMR) for the month of May 2016 (Attachment 1). Tierra is currently treating groundwater and directly discharging treated effluent water to the Passaic River. The effluent water is sampled and analyzed once per month in accordance with the NJPDES DSW Permit Equivalent.

Beginning April 1, 2014, Tierra began directly discharging the treated groundwater to the Passaic River, moving away from the previous model of batch storage and testing prior to discharge. At the beginning of the month, the effluent is sampled and analyzed for the chemical constituents listed in the NJPDES DSW Permit Equivalent. The analytical results for each sample are validated to confirm that the constituent concentrations are within the limitations established in the NJPDES DSW Permit Equivalent. The analytical results are representative of the effluent treated and discharged throughout the month.

Eleven direct discharge events resulted in the discharge of 61,839 gallons of treated groundwater to the Passaic River during the month of May 2016. The direct discharge of treated effluent water is limited to periods of high tide when the adjacent mud flats were not exposed. A flow meter was used to record the volume of treated effluent discharged to the river.

A summary of the analytical results for the May 2016 treated effluent discharged, as well as the monthly average and daily maximum concentration for each chemical constituent (please note that the recorded information for pH does not include a monthly average; however, the daily maximum and minimum pH values were recorded) is included in Attachment 2.

Two Tower Center Blvd. 10th Floor
East Brunswick, NJ 08816

If you should have any questions related to the DMR, please call me at (732) 579-7586.

Sincerely,

Brian Mikucki
On behalf of Occidental Chemical Corporation
(as successor to Diamond Shamrock Chemicals Company)

Enclosures

Cc: Ms. Elizabeth Butler
New Jersey Superfund Branch – 2
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
290 Broadway, 20th Floor
New York, New York 10007-1866

Mr. Jay Nickerson
Bureau of Case Management, Site Remediation Program
Mail Code 401-05F
P.O. Box 420
Trenton, New Jersey 08625-0420

ATTACHment 1

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow	SAMPLE	61,839	8,889	GPD	----	----	----	----	0	1/30	Flow Meter
	PERMIT REQUIREMENT	NL[1]	NL		----	----	----		0	1/30	Flow Meter
Total Suspended Solids	SAMPLE	----	----	----	N/A	10 U	10 U	mg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	30	50		0	1/30	Grab
Total Organic Carbon	SAMPLE	----	----	----	N/A	1.0 U	1.0 U	mg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	40		0	1/30	Grab
Petroleum Hydrocarbons	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	mg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	10	15		0	1/30	Grab
pH	SAMPLE	----	----	----	6.6	NA	7.96	SU	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		6	NL	9		0	1/30	Grab
2,4,6-Trichlorophenol	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	115	260		0	1/30	Grab
2-Chlorophenol	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	35	125		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	(732) 579-7586	2016	06	20
TYPED OR PRINTED			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
2,4-Dichlorophenol	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	23	150		0	1/30	Grab
Phenol	SAMPLE	----	----	----	N/A	23 U	23 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	23	40		0	1/30	Grab
1,2,4-Trichlorobenzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	45	90		0	1/30	Grab
Hexachlorobenzene	SAMPLE	5.9E-04	8.2E-04	lbs/day	N/A	22 U	22 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	NL	16.3		N/A	22	40		0	1/30	Grab
1,2-Dichlorobenzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	40	110		0	1/30	Grab
1,3-Dichlorobenzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	35		0	1/30	Grab
1,4-Dichlorobenzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	18	45		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	(732) 579-7586	2016 06 20		
TYPED OR PRINTED			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Fluoranthene	SAMPLE	----	----	----	N/A	10 U	10 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	16		0	1/30	Grab
Naphthalene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	35	105		0	1/30	Grab
Phenanthrene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	35	105		0	1/30	Grab
Benzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	21	57		0	1/30	Grab
Chlorobenzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	23	45		0	1/30	Grab
1,2-Dichloroethane	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	30	85		0	1/30	Grab
1,1,1-Trichloroethane	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	65		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	(732) 579-7586	2016	06	20
TYPED OR PRINTED			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
1,1-Dichloroethane	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	65		0	1/30	Grab
Chloroform	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	20	40		0	1/30	Grab
Trans-1,2-Dichloroethene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	65		0	1/30	Grab
Ethyl Benzene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	--	430		0	1/30	Grab
Toluene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	18	35		0	1/30	Grab
Trichloroethene	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	65		0	1/30	Grab
Vinyl Chloride	SAMPLE	----	----	----	N/A	5.0 U	5.0 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	25	65		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	(732) 579-7586	2016	06	20	
TYPED OR PRINTED			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

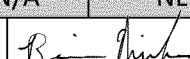
NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION FROM Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
YEAR MO	DAY		YEAR MO	DAY	
2016 05	01	TO	2016 05	31	☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
4,4-DDT	SAMPLE	9.1E-06	1.3E-05	lbs/day	N/A	0.34 U	0.34 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	NL	0.25		N/A	NL	0.34		0	1/30	Grab
4,4-DDE	SAMPLE	----	----	----	N/A	0.35 U	0.35 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	14		0	1/30	Grab
Alpha-endosulfan	SAMPLE	----	----	----	N/A	0.050 U	0.050 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	32	90		0	1/30	Grab
2,4-D	SAMPLE	----	----	----	N/A	11 U	11 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	1,500	3,300		0	1/30	Grab
2,4-DB	SAMPLE	----	----	----	N/A	16 U	16 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	17	25		0	1/30	Grab
Dinoseb (DNBP)	SAMPLE	----	----	----	N/A	1.6 U	1.6 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	420	790		0	1/30	Grab
Dioxin (2,3,7,8-TCDD)	SAMPLE	2.2E-09	3.0E-09	lbs/day	N/A	0.000081 U	0.000081 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	NL	0.00006		N/A	NL	0.000081		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		(732) 579-7586	2016	06	20	
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Recoverable Antimony	SAMPLE	----	----	----	N/A	60 U	60 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	200	305		0	1/30	Grab
Total Recoverable Arsenic	SAMPLE	----	----	----	N/A	10 U	10 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	50	115		0	1/30	Grab
Total Recoverable Beryllium	SAMPLE	----	----	----	N/A	8.6 U	8.6 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	8.6		0	1/30	Grab
Total Recoverable Cadmium	SAMPLE	----	----	----	N/A	31 U	31 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	31		0	1/30	Grab
Hexavalent Chromium	SAMPLE	----	----	----	N/A	66 U	66 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	66		0	1/30	Grab
Trivalent Chromium	SAMPLE	----	----	----	N/A	44 U	44 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	44		0	1/30	Grab
Total Recoverable Copper	SAMPLE	----	----	----	N/A	62 U	62 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	62		0	1/30	Grab

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	(732) 579-7586	2016	06	20
TYPED OR PRINTED			AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)* NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*

DISCHARGE MONITORING REPORT *(DMR)*

Form Approved
OMB No. 2040-0004

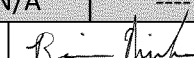
NAME Tierra Solutions, Inc. (formerly Chemical Land Holdings, Inc.)
ADDRESS Two Tower Center Boulevard 10th Floor East Brunswick, NJ 08816
FACILITY Diamond Alkali Superfund Site
LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000	----
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD					
	YEAR MO	DAY		YEAR MO	DAY
FROM	2016 05	01	TO	2016 05	31

☐ Check here if no Discharge.
Note: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Recoverable Lead	SAMPLE	----	----	----	N/A	18 U	18 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	18		0	1/30	Grab
Total Recoverable Mercury	SAMPLE	----	----	----	N/A	3.4 U	3.4 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	3.4		0	1/30	Grab
Total Recoverable Nickel	SAMPLE	----	----	----	N/A	73 U	73 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	73		0	1/30	Grab
Total Recoverable Silver	SAMPLE	----	----	----	N/A	69 U	69 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	69		0	1/30	Grab
Total Recoverable Zinc	SAMPLE	----	----	----	N/A	47 U	47 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	47		0	1/30	Grab
Total Cyanide	SAMPLE	----	----	----	N/A	78 U	78 U	µg/l	0	1/30	Grab
	PERMIT REQUIREMENT	----	----		N/A	NL	78		0	1/30	Grab
----	SAMPLE	----	----	----	N/A	----	----	----	----	----	----
	PERMIT REQUIREMENT	----	----		N/A	----	----		----	----	----

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER			TELEPHONE		DATE		
Brian Mikucki Project Coordinator	I certify under penalty of law that this document a nd all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accur ate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		(732) 579-7586	2016	06	20	
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS ***(Reference all attachments here)*** 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

ATTACHMENT 2

MAY 2016 SUPPLEMENTAL TABLE FOR MONTHLY DISCHARGE MONITORING REPORT
DIAMOND ALKALI SUPERFUND SITE
NEWARK, NEW JERSEY

Constituent	Permit Limitation		Sample ID:	W-TSI-EFF-050216	W-TSI-EFF-DUP-050216	TB-050216-691R
			Sample Date:	5/2/2016	5/2/2016	5/2/2016
	Monthly Avg.	Daily Max	SDG Number : Units	LISTER691R	LISTER691R	LISTER691R
Total Suspended Solids(TSS)	30	50	mg/l	10 U	10 U	–
Total Organic Carbon (TOC)	--	40	mg/l	1.0 U	1.0 U	–
Petroleum Hydrocarbons	10	15	mg/l	5.0 U	5.0 U	–
pH	--	6 - 9	SU	7.8 R	7.80 R	–
2,4,6-Trichlorophenol	115	260	µg/l	5 U	5 U	–
2-Chlorophenol	35	125	µg/l	5 U	5 U	–
2,4-Dichlorophenol	23	150	µg/l	5 U	5 U	–
Phenol	23	40	µg/l	23 U	23 U	–
1,2,4-Trichlorobenzene	45	90	µg/l	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	22	40	µg/l	22 U	22 U	–
1,2-Dichlorobenzene	40	110	µg/l	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	µg/l	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45	µg/l	5.0 U	5.0 U	5.0 U
Fluoranthene	--	16	µg/l	10 U	10 U	–
Naphthalene	35	105	µg/l	5 U	5 U	–
Phenanthrene	35	105	µg/l	5 U	5 U	–
Benzene	21	57	µg/l	5.0 U	5.0 U	5.0 U
Chlorobenzene	23	45	µg/l	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	30	85	µg/l	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	µg/l	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25	65	µg/l	5.0 U	5.0 U	5.0 U
Chloroform	20	40	µg/l	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25	65	µg/l	5 U	5 U	–
trans-1,2-Dichloroethene	25	65	µg/l	5.0 U	5.0 U	5.0 U
Ethylbenzene	--	430	µg/l	5.0 U	5.0 U	5.0 U
Toluene	18	35	µg/l	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	µg/l	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25	65	µg/l	5.0 U	5.0 U	5.0 U
4,4-DDT	--	0.34	µg/l	0.34 U	0.34 U	–
4,4-DDE	--	14	µg/l	0.35 U	0.35 U	–
Endosulfan I	32	90	µg/l	0.05 U	0.05 U	–
2,4-D	1,500	3,300	µg/l	11 U	11 U	–
2,4-DB	17	25	µg/l	16 U	16 U	–
Dinoseb (DNBP)	420	790	µg/l	1.6 U	1.6 U	–
Dioxin (2,3,7,8-TCDD)	--	0.000081	µg/l	0.000081 U	0.000081 U	–
Total Recoverable Antimony	200	305	µg/l	60 U	60 U	–
Total Recoverable Arsenic	50	115	µg/l	10 U	10 U	–
Total Recoverable Beryllium	--	8.6	µg/l	8.6 U	8.6 U	–
Total Recoverable Cadmium	--	31	µg/l	31 U	31 U	–
Hexavalent Chromium	--	66	µg/l	66 U	66 U	–
Trivalent Chromium	--	44	µg/l	44 U	44 U	–
Total Recoverable Copper	--	62	µg/l	62 U	62 U	–
Total Recoverable Lead	--	18	µg/l	18 U	18 U	–
Total Recoverable Mercury	--	3.4	µg/l	3.4 U	3.4 U	–
Total Recoverable Nickel	--	73	µg/l	73 U	73 U	–
Total Recoverable Silver	--	69	µg/l	69 U	69 U	–
Total Recoverable Zinc	--	47	µg/l	47 U	47 U	–
Total Cyanide	--	78	µg/l	78 U	78 U	–

Notes:
mg/l - Milligrams/liter
µg/l - Micrograms/liter
SU - Standard units
-- - Not analyzed or not applicable
U - Constituent was not detected above the associated detection limit
R - Result is rejected .
Trivalent Chromium Concentration is calculated based on the total and hexavalent chromium results.

MAY 2016 MONTHLY DISCHARGE ANALYTICAL DATA SUMMARY
DIAMOND ALKALI SUPERFUND SITE
NEWARK, NEW JERSEY

Constituent	Permit Limitation		Units	W-TSI-EFF-050216 LISTER691R	Monthly Average[1]	Daily Maximum
	Monthly Avg.	Daily Max				
Flow	–	--	GPD	--	61,839	8,889
Total Suspended Solids(TSS)	30	50	mg/l	10 U	10 U	10 U
Total Organic Carbon (TOC)	–	40	mg/l	1.0 U	1.0 U	1.0 U
Petroleum Hydrocarbons	10	15	mg/l	5.0 U	5.0 U	5.0 U
Field pH Range (May, 2016)	–	6 - 9	SU	6.60 - 7.96	NA	7.96
2,4,6-Trichlorophenol	115	260	µg/l	5 U	5.0 U	5 U
2-Chlorophenol	35	125	µg/l	5 U	5.0 U	5 U
2,4-Dichlorophenol	23	150	µg/l	5 U	5.0 U	5 U
Phenol	23	40	µg/l	23 U	23 U	23 U
1,2,4-Trichlorobenzene	45	90	µg/l	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	22	40	µg/l	22 U	22 U	22 U
Hexachlorobenzene	–	16.3	lbs/d	NA	5.9E-04	8.2E-04
1,2-Dichlorobenzene	40	110	µg/l	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	µg/l	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45	µg/l	5.0 U	5.0 U	5.0 U
Fluoranthene	–	16	µg/l	10 U	10.0 U	10 U
Naphthalene	35	105	µg/l	5 U	5.0 U	5 U
Phenanthrene	35	105	µg/l	5 U	5.0 U	5 U
Benzene	21	57	µg/l	5.0 U	5.0 U	5.0 U
Chlorobenzene	23	45	µg/l	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	30	85	µg/l	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	µg/l	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25	65	µg/l	5.0 U	5.0 U	5.0 U
Chloroform	20	40	µg/l	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25	65	µg/l	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	25	65	µg/l	5.0 U	5.0 U	5.0 U
Ethylbenzene	–	430	µg/l	5.0 U	5.0 U	5.0 U
Toluene	18	35	µg/l	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	µg/l	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25	65	µg/l	5.0 U	5.0 U	5.0 U
4,4-DDT	–	0.34	µg/l	0.34 U	0.34 U	0.34 U
4,4-DDT	–	0.25	lbs/d	NA	9.1E-06	1.3E-05
4,4-DDE	–	14	µg/l	0.35 U	0.35 U	0.35 U
Endosulfan I	32	90	µg/l	0.05 U	0.050 U	0.05 U
2,4-D	1,500	3,300	µg/l	11 U	11.0 U	11 U
2,4-DB	17	25	µg/l	16 U	16.0 U	16 U
Dinoseb (DNBP)	420	790	µg/l	1.6 U	1.6 U	1.6 U
Dioxin (2,3,7,8-TCDD)	–	0.000081	µg/l	0.000081 U	0.000081 U	0.000081 U
Dioxin	–	0.00006	lbs/d	NA	2.2E-09	3.0E-09
Total Recoverable Antimony	200	305	µg/l	60 U	60 U	60 U
Total Recoverable Arsenic	50	115	µg/l	10 U	10 U	10 U
Total Recoverable Beryllium	–	8.6	µg/l	8.6 U	8.6 U	8.6 U
Total Recoverable Cadmium	–	31	µg/l	31 U	31 U	31 U
Hexavalent Chromium	–	66	µg/l	66 U	66 U	66 U
Trivalent Chromium	–	44	µg/l	44 U	44 U	44 U
Total Recoverable Copper	–	62	µg/l	62 U	62 U	62 U
Total Recoverable Lead	–	18	µg/l	18 U	18 U	18 U
Total Recoverable Mercury	–	3.4	µg/l	3.4 U	3.4 U	3.4 U
Total Recoverable Nickel	–	73	µg/l	73 U	73 U	73 U
Total Recoverable Silver	–	69	µg/l	69 U	69 U	69 U
Total Recoverable Zinc	–	47	µg/l	47 U	47 U	47 U
Total Cyanide	–	78	µg/l	78 U	78 U	78 U

Notes:
GPD - Gallons per day
mg/l - Milligrams/liter
µg/l - Micrograms/liter
SU - Standard units
-- - Not analyzed or not applicable
U - Constituent was not detected above the associated detection limit.
(1) A Monthly Average Flow value is not calculated, value presented is the actual total flow (in gallons) for the month.
Monthly averages are based on 1/2 the detection limit, where applicable.
The mass loadings for hexachlorobenzene, 4,4-DDT, and 2,3,7,8-TCDD (dioxin) were calculated based on 1/2 of the detection limit.